



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

Dorothy Rice
Executive Director
California State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Dear Ms. Rice:

The Environmental Protection Agency (EPA) has completed a review of those portions of the amendment to the Water Quality Control Plan for the San Francisco Bay Region (the Basin Plan), adopted under Resolution No. R2-2007-0042, that establish water quality objectives for copper in portions of San Francisco Bay. The amendment establishes site-specific water quality objectives for copper in all segments of San Francisco Bay under and north of the Dumbarton Bridge within the San Francisco Bay Region, and includes an implementation plan to ensure attainment of the water quality objectives. I am pleased to inform you we are approving the site-specific water quality objectives, subject to the results of consultation under section 7(a)(2) of the Endangered Species Act (ESA) with the U.S. Fish and Wildlife Service (U.S. FWS) and the National Marine Fisheries Service (NMFS) (collectively, the Services).

The California Regional Water Quality Control Board, San Francisco Bay Region, (Regional Board) adopted the amendment under Resolution R2-2007-0042 on June 13, 2007. The California State Water Resources Control Board (State Board) approved the amendment on January 15, 2008 under Resolution No. 2008-0005, and the California Office of Administrative Law (OAL) approved the amendment on May 13, 2008, OAL file No. 2008-0401-02S. EPA received the State Board's Record of Adoption and request for approval on July 28, 2008. By this letter, EPA is approving the site-specific water quality objectives for copper for all segments of San Francisco Bay under and north of the Dumbarton Bridge within the San Francisco Bay Region, contained in Resolution No. R2-2007-0042, subject to the results of consultation under section 7(a)(2) of the ESA.

The Regional Board Amendment

Regional Board Resolution No. R2-2007-0042 amends the Basin Plan to include water column water quality objectives of: 6.0 ug/l dissolved copper as a 4-day average, and 9.4 ug/l dissolved copper as a 1-hour average, for the portion of the delta located in the San Francisco Bay Region, Suisun Bay, Carquinez Strait, San Pablo Bay, Central San Francisco Bay, and the portion of the Lower San Francisco Bay north of the line

representing the Hayward Shoals on Figure 7.1 of the Basin Plan; and 6.9 ug/l dissolved copper as a 4-day average, and 10.8 ug/l dissolved copper as a 1-hour average, in the portion of the Lower San Francisco Bay south of the line representing the Hayward Shoals shown on Figure 7.1 of the Basin Plan, and under and north of the Dumbarton Bridge. The site-specific water quality objectives for South San Francisco Bay (south of the Dumbarton Bridge) were previously adopted by the State, and were approved by EPA on January 21, 2003. The site-specific water quality objectives are intended to protect aquatic life.

The site-specific objectives were calculated in accordance with EPA's *Interim Guidance on Determination and Use of Water-Effects Ratios for Metals*, EPA 823-B-94-001. The calculations used to determine the site-specific objectives involved recalculating the underlying criteria using the indicator species procedure, and then applying appropriate Water Effects Ratios (WERs).

Today's Action

Section 303(c) of the Clean Water Act (CWA) requires EPA to approve or disapprove new or revised state-adopted water quality standards. The State regulatory provisions that are subject to EPA's approval authority under CWA section 303(c) are those addressing antidegradation, beneficial uses, water quality criteria, and certain provisions addressing implementation of water quality standards for surface waters.

EPA has determined that the portions of the above Basin Plan amendment to establish site-specific water quality objectives for copper are subject to EPA's CWA section 303(c) approval authority. Pursuant to CWA section 303(c) and the implementing federal regulations at 40 CFR 131, EPA hereby approves the adoption of the site-specific copper water quality objectives, subject to the results of the ESA section 7(a)(2) consultation with the Services. EPA's approval is based on our finding that these portions of the amendment are consistent with the requirements of the CWA and EPA's regulations at 40 CFR 131.5 and 131.6.

Public Participation

EPA compliments the State on its efforts to include the public in the development and review of the site-specific water quality standards. Public involvement is an integral component of a successful water quality program. On March 2, 2007, the Regional Board publicly noticed and distributed the Proposed Basin Plan Amendment, and took written comments. On May 9, 2007, and on June 13, 2007, the Regional Board held public hearings at which they heard public testimony on the proposed amendment. On November 2, 2007, the State Board publicly noticed the opportunity to provide written comments on its proposed approval of the amendment; and on January 15, 2008, the State Board took public testimony during its hearing on the amendment. Based upon our review, we have concluded that the public review procedures followed by the State in the development of Regional Board Resolution No. R2-2007-0042 and State Board Resolution No. 2008-0005 were consistent with the procedural requirements for public participation in triennial reviews, adoption, and revisions of state water quality standards.

ESA Consultation with the Services on EPA's Action

Section 7(a)(2) of the ESA states that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species (listed species) or result in the destruction or adverse modification of critical habitat. On September 2, 2008, EPA initiated informal consultation with the NMFS, and on November 10, 2008, initiated informal consultation with the FWS, on our action today concerning the site-specific water quality objectives for copper in San Francisco Bay, under and north of the Dumbarton Bridge. Pursuant to the August 2002 *Memorandum of Agreement Between the Environmental Protection Agency, Fish and Wildlife Service, and National Marine Fisheries Service Regarding Enhanced Coordination Under the Clean Water Act and Endangered Species Act* (MOA, EPA-823-R-02-003), EPA is consulting with FWS and NMFS on national CWA 304(a) criteria, including the aquatic life copper criteria. The MOA provides that, during the national CWA 304(a) consultations, EPA may approve state water quality criteria that are identical or more stringent than the existing CWA 304(a) criteria, pending the results of the national consultations, and that such action will be covered by the national consultation.

As noted above, the calculation used to determine the site-specific objectives being approved today involved recalculating the underlying criteria using the indicator species procedure, and then applying a Water Effects Ratio or WER. The underlying recalculated copper criteria (objectives) in the State's water quality standards are more stringent than the current CTR criteria, which are the same as the national CWA 304(a) criteria.


The CTR included default WER values of 1 for metals including copper, and provided that the State could adjust criteria through the application of EPA's WER procedure. Performing the testing to use a site-specific WER is optional on the part of the State. A WER is an appropriate measure of the toxicity of a material obtained in site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water. (See preamble language to the CTR, 65 FR 31682, at 31691, May 18, 2000.)

Because the recalculated underlying criteria used to calculate the site-specific objectives are more stringent than the current CTR copper criteria, and the site-specific objectives as applied therefore are more stringent than the CTR copper standards as applied, EPA is deferring further consultation on this action pending completion of consultation on the national CWA 304(a) criteria, and is approving the objectives subject to the results of consultation under section 7 of the ESA.

EPA commends the San Francisco Regional Board staff for its work on the amendment adopted under Regional Board Resolution No. R2-2007-0042. If there are any questions regarding EPA's action, please contact Janet Hashimoto at (415) 972-3452.

As always, EPA looks forward to continued cooperation with the State in achieving our mutual environmental goals.

Sincerely,

 6 January 2009
Alexis Strauss
Director, Water Division

cc: Bruce H. Wolfe, California Regional Water Quality Control
Board, San Francisco Bay Region
Caroline Whitehead, EPA Office of Water, Mail Code 4301
Thomas Maurer, U.S. Fish and Wildlife Service
Joseph Dillon, National Marine Fisheries Service